

**Keystone Pipeline Project:
Level I and II Cultural Resource Investigations
in Eastern South Dakota**

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Abstract

TransCanada Keystone Pipeline, LP intends to construct and operate a new crude oil pipeline originating in Alberta, Canada and terminating in the Midwestern United States. In South Dakota, the proposed route of the pipeline includes Brown, Marshall, Day, Clark, Beadle, Kingsbury, Miner, Hanson, McCook, Hutchinson, and Yankton counties. For the undertaking, the lead Federal agency is the Department of State and the lead state agency is the South Dakota State Historic Preservation Office.

ENSR Corporation, a subcontractor of TransCanada Keystone Pipeline, LP, contracted Metcalf Archaeological Consultants, Inc. to conduct cultural resource investigations of the proposed pipeline route within South Dakota. The length of the pipeline in South Dakota is approximately 218.9 miles. Levels I and II cultural investigations were completed during 2006. The Level I literature and record search was two miles wide centered on the proposed centerline. A reconnaissance vehicular survey covered 100% of the proposed pipeline route. Finally, the Level II cultural resource pedestrian inventory included a 23% sample of the proposed pipeline route, 300 feet wide centered on the proposed centerline. A total of 49.35 miles, or approximately 1,794.6 acres, comprise the Level II inventory. In addition to the pedestrian survey, 26 shovel test probes were excavated at locations with potential for buried cultural deposits.

Cultural resources recorded during the Level II inventory include three archaeological sites, three historic sites, two structures (architectural sites), two historic/architectural sites, and two archaeological isolated finds. In addition, five previously recorded historic railroad sites were updated.

Two prehistoric rock cairn sites (39DA71 and 39YK77) are recommended as eligible for the National Register of Historic Places. Site 39YK79, a prehistoric cultural material scatter, appears to be eligible for the National Register of Historic Places but systematic subsurface testing is recommended in order to make an accurate determination. TransCanada Keystone Pipeline, LP plans to avoid all three archaeological sites by rerouting the pipeline. Survey of these reroutes is scheduled for spring 2007. The historic sites (39CK50, 39HT133, and 39YK78), architectural sites (DA-000-00951 and KB-000-00462), and historic/architectural site (39DA70 with DA-000-00950), as evaluated within the 300 foot wide survey corridor, are non-contributing elements to the perceived larger farmstead sites and do not meet the criteria of eligibility for the National Register of Historic Places. The portions of the sites outside of the 300 foot wide survey corridor remain unevaluated for the National Register of Historic Places. One historic/architectural site (39HT134 with HT-002-00001 and HT-002-00002) extends beyond the confines of the 300 foot wide survey corridor and remains unevaluated for the National Register of Historic Places. Due

to the presence of Euro-American infant burials, avoidance of site 39HT134 is recommended and will be avoided by rerouting the proposed pipeline. With the exception of 39HT134, avoidance is not recommended for the historic and architectural sites because they are non-contributing elements to the overall sites. Moreover, pipeline construction plans include avoidance of structures. The isolated finds are recommended not eligible for the National Register of Historic Places. The five historic railroad sites will be avoided by boring the pipeline underneath the sites.

Provided that sites 39DA71, 39YK77, 39YK79, and 39HT134 are avoided by TransCanada Keystone Pipeline, LP, a finding of *no historic properties affected* is recommended for the proposed undertaking as described herein, mapped and surveyed.

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Chapter 1: Comprehensive Introduction

Introduction

TransCanada Keystone Pipeline, LP (TransCanada) intends to construct and operate a new pipeline (Mainline) approximately 1,845 miles long, originating in Hardisty, Alberta, Canada and terminating in Patoka, Illinois, United States (Figure 1). The crude oil pipeline will run through eastern South Dakota, from the North Dakota/Brown County border approximately 218.9 miles south to the Yankton County/Nebraska border. The proposed pipeline runs through Brown, Marshall, Day, Clark, Beadle, Kingsbury, Miner, Hanson, McCook, Hutchinson, and Yankton counties in South Dakota (Figure 2). The survey corridor is 300 feet wide centered on the proposed pipeline centerline. From this point forward, the 300 foot wide survey corridor will be referred to as the project corridor. For the proposed undertaking, the Department of State is the lead Federal agency and the South Dakota State Historic Preservation Office (SDSHPO) is the lead state agency.

This report documents cultural resource investigations conducted by Metcalf Archaeological Consultants, Inc. (MAC) in 2006 along the proposed TransCanada Keystone Pipeline route in South Dakota. Chapter 1 is an introduction to the project, including the project description and locations. Chapter 2 (project setting) and Chapter 3 (cultural chronology) provide context for the cultural resource investigations discussed here. The Level I record and literature search is reviewed in Chapter 4. The Level II inventories are discussed in Chapter 5. Chapter 6 provides the results of the Level II inventories. Chapter 7 is a summary of the project with recommendations for the treatment of cultural resources along the proposed pipeline route, including an unanticipated discovery plan.

Several appendices supplement information contained in the report. Appendix 1 is a copy of the project Research Design. Note, three changes have occurred since the Research Design was submitted to the South Dakota State Historic Preservation Office (SDSHPO). First, the width of the construction corridor was 125 feet wide and now is 110 feet wide. Second, regarding Native American consultation, the Department of State has determined that it will conduct Nation to Nation consultation with Native American Tribes. Third, the Research Design erroneously stated that MAC would be conducting a Level III inventory. In fact, MAC conducted Levels I and II inventories and a reconnaissance survey. Appendix 2 is the geoarchaeological analysis produced by LaRamie Soils Service, Inc. (LSS). A final version with complete results and monitoring recommendations will be provided in a forthcoming addendum report. Appendix 3 contains a set of project maps depicting the 2006 Level II investigations. The complete record search for all work conducted in 2006 is listed in Appendix 4. Curriculum vitae of appropriate personnel comprise Appendix 5. Appendix 6 contains copies of the site forms submitted to the SDSHPO. Finally, Appendix 7 provides a copy of the Native American consultation letter prepared by MAC and list of the Tribes to which it was sent. It should be noted that we were requested to initiate the invitation to consult early in the project history, at a time when there was some confusion about who would be responsible for consultation.

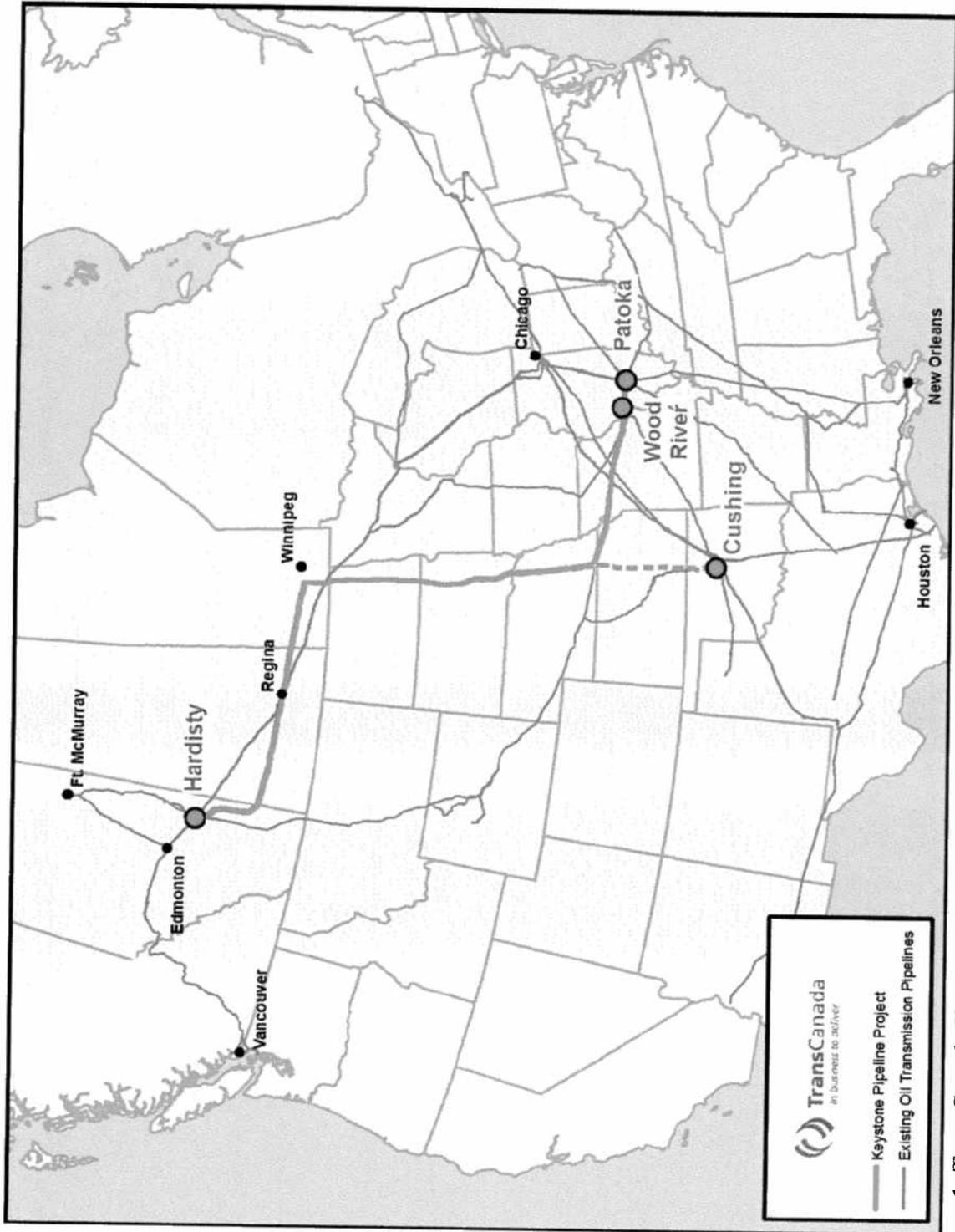


Figure 1. TransCanada Keystone Pipeline Project overview map (Courtesy of ENSR Corporation).

Keystone Pipeline - Phase 1 - South Dakota
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